

AMENDMENTS TO THE SPECIFICATION

On Page 1, between the title and the first line of the specification, please insert the following paragraph:

This invention was made with government support under Department of Energy Contract No. B517552. The government has certain rights in this invention.

Please replace the paragraph extending from page 10, line 16 to page 11, line 6 with the following:

This novel arrangement of plenums exploits the observation, described earlier, that volumetric flow rate in the cold plenum decreases with distance z from the raised floor shown generally as 28, whereas volumetric flow rate in the hot plenum increases with z . Floor 28 has tiles 45, above a space 46, for conducting the cooling medium, space 46 being defined between tiles 45 and a floor 47. That is, the hot and cold plenums are naturally complementary; at a height where the volumetric flow rate is minimum in one, it is maximum in the other, and vice versa. By segregating the hot and cold plenums, the prior art fails to exploit this complementarity. In contrast, the present invention deliberately exploits it. By integrating a hot and cold plenum between each pair of racks, and separating the hot plenum from the cold by a sloping partition, the width (i.e. the cross sectional area) of each plenum is roughly matched, as a function of z , to the local volumetric flow rate. Moreover, because the partition walls 40A, 40B, 40C,

40D are sloped, the air flowing through each rack turns corners that are less sharp than in the prior-art scheme. For both reasons, it is therefore possible with this invention, in a fixed amount of plenum space, to incur less pressure drop and thereby to carry more air (for a given arrangement of fans or blowers), leading to enhanced cooling and lower temperatures of the electronics.